

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
30 June 2005 (30.06.2005)

PCT

(10) International Publication Number  
**WO 2005/058941 A2**

(51) International Patent Classification<sup>7</sup>:

C07K

(21) International Application Number:

PCT/US2004/044093

(22) International Filing Date:

17 December 2004 (17.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/530,481 17 December 2003 (17.12.2003) US

(71) Applicants (for all designated States except US): ELAN PHARMACEUTICALS, INC. [US/US]; 800 Gateway Boulevard, South San Francisco, CA 94080 (US). WYETH [US/US]; Five Giralta Farms, Madison, NJ 07940 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ARUMUGHAM, Rasappa, G. [US/US]; 102 Barton Lane, Chapel Hill, NC 27516 (US). PRASAD, A., Krishna [IN/US]; 105 Worsham Drive, Chapel Hill, NC 27516 (US).

(74) Agents: CELLI, Rosemarie, L. et al.; Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834 (US).

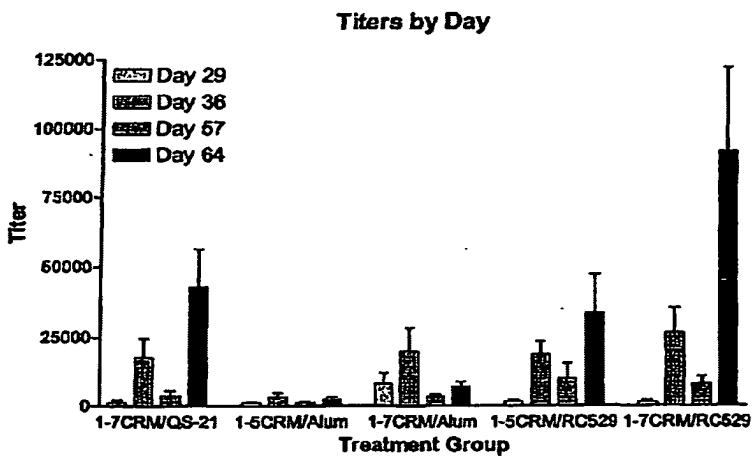
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*{Continued on next page}*

(54) Title: A<sub>β</sub> IMMUNOGENIC PEPTIDE CARRIER CONJUGATES AND METHODS OF PRODUCING SAME

WO 2005/058941 A2



(57) **Abstract:** The present invention is directed to methods of producing conjugates of A<sub>β</sub> peptide immunogens with protein/polypeptide carrier molecules, which are useful as immunogens, wherein peptide immunogens are conjugated to protein carriers via activated functional groups on amino acid residues of the carrier or of the optionally attached linker molecule, and wherein any unconjugated reactive functional groups on amino acid residues are inactivated via capping, thus retaining the immunological functionality of the carrier molecule, but reducing the propensity for undesirable reactions that could render the conjugate less safe or effective. Furthermore, the invention also relates to such immunogenic products and immunogenic compositions containing such immunogenic products made by such methods.